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Michael R. Emmert-Buck

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KLARQUIST SPARKMAN, LLP  
121 S.W. SALMON STREET  
SUITE #1600  
PORTLAND, OR 97204-2988

EXAMINER

SANG, HONG

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Please find below and/or attached an Office communication concerning this application or proceeding.

### EXAMINER'S AMENDMENT

**RE: Emmert-Buck**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anne Carlson on 12/26/2006.

The application has been amended as follows:

**a. *Claim 1 was amended as following:***

1. (Currently amended) A method of analyzing a biological specimen, comprising: placing the biological specimen on a substrate with a plurality of different layers, wherein the plurality of different ~~layers~~ layers of the substrate contain different identification molecules that interact with different components from the biological specimen; and

transferring components from the biological specimen through the plurality of different layers under conditions that allow the components to interact different identification molecules in the different layers of the substrate, wherein a two-dimensional architecture of the biological specimen is preserved throughout the transfer such that the transferred components interacting with the different identification molecules produce a pattern on each of the different layers, and

wherein the pattern on each layers corresponds to the location of the components from the biological specimen,  
thereby analyzing the biological specimen.

**b. Claim 3 was cancelled.**

3. (Cancelled).

**c. Claim 67 was amended as following:**

67. (Currently Amended) The method of claim 2 1, wherein the transferred components that interact with the different identification molecules comprise intact proteins or intact nucleic acid molecules that have not been subjected to proteolytic or nucleolytic reactions prior to transfer through the different layers of the substrate.

**d. Claim 68 was amended as following:**

68. (Currently Amended) The method of claim 2 1, further comprising capturing a component of the components of the biological specimens, and performing mass spectroscopy sequencing to identify the captured component.

**e. Claim 69 was amended as following:**

69. (Currently Amended) The method of claim 2 1, wherein transferring components from the biological specimen through the layered substrate produces a three dimensional matrix, wherein a surface of the substrate on which the biological

specimen is placed provides a two dimensional matrix, and a third dimension is provided by transfer of components from the biological specimens through the different layers, wherein there is an identifiable correspondence between a position of the component from the biological specimen in the two dimensional matrix and a position of the transferred components in the three dimensional matrix.

***f. Claim 72 was amended as following:***

72. (Currently amended) The method of claim 1, wherein the pattern on each ~~(layer)~~ layer is further informative about the quantity of the components in the biological specimen.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Sang whose telephone number is (571) 272 8145. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry R. Helms can be reached on (571) 272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hong Sang, Ph.D.  
Art Unit: 1643  
Dec. 26, 2006

  
CHRISTOPHER H. YAEN  
PRIMARY EXAMINER